

Application Serial No.: 10/618,643
Reply to Office Action dated July 2, 2004

REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1 and 3-17 are presently active in this case, Claims 1-7 having been amended, Claim 2 having been canceled without prejudice or disclaimer, and Claims 8-17 having been added by way of the present Amendment.

In the outstanding Official Action, the disclosure was objected to because of minor informalities. Accordingly, the typographical error on page 10 of the specification has been corrected by amendment. Accordingly, the Applicant requests the withdrawal of the objection to the disclosure.

Claim 2 was objected to under 37 CFR 1.75(c). Claim 2 has been canceled without prejudice or disclaimer, thereby rendering this objection moot. Accordingly, the Applicant requests the withdrawal of the objection to Claim 2.

Claims 5-7 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. These claims were rejected for failing to specify steps being performed in the method recited therein. The Applicant notes that Claim 7 is an apparatus claim, which is dependent on Claim 4, and therefore the Applicant submits that this rejection does not pertain to Claim 7. Regarding Claims 5 and 6, Claim 5 has been amended to clarify the method steps being performed in the recited method. Accordingly, the Applicant requests the withdrawal of the indefiniteness rejection.

Claims 1-7 were rejected under 35 U.S.C. 102(a) and (e) as being anticipated by Shimomura (U.S. Patent No. 6,432,017 B1). Claims 1-7 were rejected under 35 U.S.C. 102(b) as being anticipated by Hoguchi (EP 0 581 483 A1). For the reasons discussed below, the Applicant requests the withdrawal of the anticipatory rejections.

In the Office Action, the Shimomura reference and the Hoguchi reference are indicated as independently anticipating independent Claims 1 and 5. However, the Applicant notes that a claim is anticipated only if each and every element as set forth in the claims is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). As will be demonstrated below, the cited references clearly do not meet each and every limitation of the independent Claims 1 and 5.

Claim 1 of the present application recites a clutch gear having a boss part with a spline which is formed on an outer peripheral surface of the boss part formed on an axial end surface of the clutch gear having jaw clutch teeth formed on an outer peripheral surface thereof. The boss part is formed integrally and coaxially with the clutch gear, the diameter of the boss part is shorter than that of the clutch gear, and an end part of an effective portion of the spline comes out of an end surface of a part having the jaw clutch teeth on the clutch gear. The axial length of the spline is longer than that of the jaw clutch teeth. Claim 5 recites a method for manufacturing a clutch gear having a boss part with a spline which is formed on an outer peripheral surface of the boss part formed on an axial end surface of the clutch gear having jaw clutch teeth formed on an outer peripheral surface thereof. The method comprises, among other features, forging the clutch gear with the boss part such that the boss

part is smaller in diameter than the clutch gear and such that the boss part is integrally and coaxially formed with the clutch gear, where the spline extends to a location beneath the jaw clutch teeth, and an axial length of the spline is longer than an axial length of the jaw clutch teeth.

The Shimomura reference is cited for the gears depicted in Figures 6(a) and 7.

Regarding Figure 6(a), the Official Action cites feature (2) for the teaching of a spline formed on an outer periphery of a boss, and feature (1) is cited for the teaching of jaw teeth on the clutch gear. However, Claim 1 of the present application recites that the diameter of the boss part is shorter than that of the clutch gear, that an end part of an effective portion of the spline comes out of an end surface of a part having the jaw clutch teeth on the clutch gear, and that the axial length of the spline is longer than that of the jaw clutch teeth. Additionally, Claim 5 recites that the boss part is smaller in diameter than the clutch gear, that the spline extends to a location beneath the jaw clutch teeth, and that an axial length of the spline is longer than an axial length of the jaw clutch teeth. The feature (2) of the Shimomura reference that is cited as the spline does not have an end part of an effective portion of the spline that comes out of an end surface of a part having the jaw clutch teeth on the clutch gear, as recited in Claim 1, nor does feature (2) extend to a location beneath feature (1) cited as the jaw clutch teeth, as recited in Claim 5. In fact, feature (1) does not overlap with feature (2) in any regard.

Accordingly, the Applicant respectfully submits that Figure 6(a) of the Shimomura reference does not disclose all of the limitations recited in Claims 1 and 5 of the present application.

Additionally, it is noted that the configuration depicted in Figure 6(a) is not in fact the final product, but rather the Shimomura reference expressly teaches away from the

configuration depicted in Figure 6(a) as being the final product by expressly teaching additional processing steps necessary to achieve a final product having the desired characteristics.

Regarding Figure 7, the Official Action cites feature (1) for the teaching of a spline formed on an outer periphery of a boss, and feature (2) is cited for the teaching of jaw teeth on the clutch gear. However, the Applicant notes that the axial length of feature (1), which is cited for the teaching of the spline, is clearly shorter than that of feature (2), which is cited for the teaching of the jaw clutch teeth, which is directly contrary to the limitations recited in Claims 1 and 5. Claims 1 and 5 expressly recite that the axial length of the spline is longer than that of the jaw clutch teeth. Accordingly, the Applicant respectfully submits that Figure 7 of the Shimomura reference does not disclose all of the limitations recited in Claims 1 and 5 of the present application.

The Hoguchi reference is cited a feature (16), which is cited for the teaching of a spline formed on an outer periphery of a boss, and feature (17), which is cited for the teaching of jaw teeth on the clutch gear. However, as noted above, Claim 1 of the present application recites that the axial length of the spline is longer than that of the jaw clutch teeth. Additionally, Claim 5 recites that an axial length of the spline is longer than an axial length of the jaw clutch teeth. The feature (16) of the Hoguchi reference that is cited as the spline is clearly not longer than feature (17) that is cited for the teaching of the jaw clutch teeth. Accordingly, the Applicant respectfully submits that the Hoguchi reference does not disclose all of the limitations recited in Claims 1 and 5 of the present application.

Accordingly, the Applicant respectfully requests the withdrawal of the anticipation rejections of Claims 1 and 5.

Claims 3, 4, 7, and 8 are considered allowable for the reasons advanced for Claim 1 from which they depend. These claims are further considered allowable as they recite other features of the invention that are neither disclosed nor suggested by the applied references when those features are considered within the context of Claim 1.

Claim 6 is considered allowable for the reasons advanced for Claim 5 from which it depends. This claim is further considered allowable as it recites other features of the invention that are neither disclosed nor suggested by the applied references when those features are considered within the context of Claim 5.

Claims 8-17 have been added to the present application. No new matter has been added, since each of these claims clearly find support in the specification and drawings originally filed. Newly added Claims 8-17 are considered allowable as they recite features of the invention that are neither disclosed nor suggested by the references of record.

New independent Claim 9 advantageously recites a clutch gear comprising a boss part having a spline on an outer peripheral surface thereof, and a flange part having jaw clutch teeth formed on an outer peripheral surface thereof. The boss part is formed integrally and coaxially with the flange part by forging. A diameter of the boss part is smaller than that a diameter of the flange part, the spline extends to a location beneath the jaw clutch teeth, and an axial length of the spline is longer than an axial length of the jaw clutch teeth. Such a combination of features is not disclosed in the cited art.

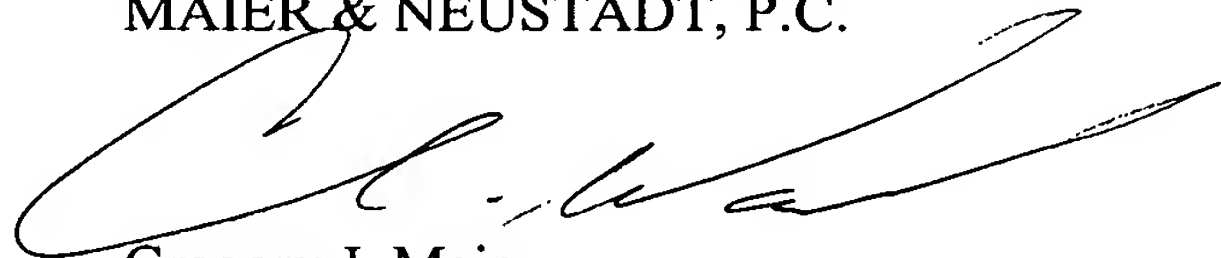
Application Serial No.: 10/618,643
Reply to Office Action dated July 2, 2004

New independent Claim 14 advantageously recites a method for manufacturing a clutch gear comprising a boss part having a spline on an outer peripheral surface thereof and a flange part having jaw clutch teeth formed on an outer peripheral surface thereof. The method comprises forging the boss part and the flange part to integrally and coaxially form the boss part and the flange part, where a diameter of the boss part is smaller than that a diameter of the flange part, the spline extends to a location beneath the jaw clutch teeth, and an axial length of the spline is longer than an axial length of the jaw clutch teeth. Such a combination of features is not disclosed in the cited art.

Consequently, in view of the above discussion, it is respectfully submitted that the present application is in condition for formal allowance and an early and favorable reconsideration of this application is therefore requested.

Respectfully Submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Gregory J. Maier
Registration No. 25,599
Attorney of Record

Christopher D. Ward
Registration No. 41,367

Customer Number

22850

Tel. (703) 413-3000
Fax. (703) 413-2220
(OSMMN 10/01)

GJM:CDW:brf
I:\atty\cdw\240322US3\am1.doc